Clinical trial results:
Effect of methylnaltrexone on intragastric pressure, the occurrence of transient lower esophageal sphincter relaxations and reflux events in healthy subjects: a double-blind, placebo-controlled, randomized, cross-over study

Summary

EudraCT number	2016-000532-17
Trial protocol	BE
Global end of trial date	12 October 2015

Results information

Result version number	v1 (current)
This version publication date	07 February 2021
First version publication date	07 February 2021
Summary attachment (see zip file)	Article methylnaltrexone on TLESRs (nmo.12938.pdf)

Trial information

Trial identification

Sponsor protocol code	Methylnaltrexone2016

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	-
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	TARGID
Sponsor organisation address	Herestraat 49, Leuven, Belgium, 3000
Public contact	TARGID, K.U. Leuven, 32 16344225, jan.tack@kuleuven.be
Scientific contact	TARGID, K.U. Leuven, 32 16344225, jan.tack@kuleuven.be

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	03 February 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	12 October 2015
Global end of trial reached?	Yes
Global end of trial date	12 October 2015
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To investigate the effect of methylnaltrexone on intragastric pressure, the occurrence of transient lower esophageal sphincter relaxations and reflux events in healthy subjects

Protection of trial subjects:

Identification of trial subjects was protected by implementation of subject numbers.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	23 June 2015
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Belgium: 15
Worldwide total number of subjects	15
EEA total number of subjects	15

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	15
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Healthy volunteers were included in this study

Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Single blind
Roles blinded	Subject

Arms

Are arms mutually exclusive?	No
Arm title	Methylnaltrexone subcutaneous + placebo infusion

Arm description: -

Arm type	Experimental
Investigational medicinal product name	Methylnaltrexone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

subcutaneous injection of 12 mg methylnaltrexone (Relistor®; Wyeth Pharmaceucals, Louvain- la-Neuve, Belgium; 0.6 mL)

Investigational medicinal product name	Saline solution
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

intravenous infusion of saline (bolus injecton of 1 mL followed by a continuous infusion of 100 mL/h),

Arm title	Methylnaltrexone subcutaneous + naloxone infusion

Arm description: -

Arm type	Active comparator
Investigational medicinal product name	Methylnaltrexone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

subcutaneous injection of 12 mg methylnaltrexone (Relistor®; Wyeth Pharmaceucals, Louvain- la-Neuve, Belgium; 0.6 mL)

Investigational medicinal product name	Naloxone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for infusion

Routes of administration	Intravenous use

Dosage and administration details:

intravenous infusion of naloxone (0.4 mg intravenous bolus [1 mL] followed by continuous infusion 20 µg/kg/h [100 mL/h]; 'Narcan', Bristol- Myers Squibb Pharma, Braine- l'Alleud, Belgium

Arm title	Placebo subcutaneous + placebo infusion

Arm description: -

Arm type	Placebo
Investigational medicinal product name	Saline solution
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

intravenous infusion of saline (bolus injecton of 1 mL followed by a continuous infusion of 100 mL/h),

Investigational medicinal product name	Saline solution
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

subcutaneous injection of saline

Number of subjects in period 1	Methylnaltrexone subcutaneous + placebo infusion	Methylnaltrexone subcutaneous + naloxone infusion	Placebo subcutaneous + placebo infusion
Started	15	15	15
Completed	15	15	15

Baseline characteristics

Reporting groups

Reporting group title	Overall trial (overall period)

Reporting group description: -

Reporting group values	Overall trial (overall period)	Total	
Number of subjects	15	15	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	15	15	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous Units: years			
arithmetic mean	34.1		
full range (min-max)	18 to 42	-	
Gender categorical Units: Subjects			
Female	9	9	
Male	6	6	

End points

End points reporting groups	
Reporting group title	Methylnaltrexone subcutaneous + placebo infusion
Reporting group description: -	
Reporting group title	Methylnaltrexone subcutaneous + naloxone infusion
Reporting group description: -	
Reporting group title	Placebo subcutaneous + placebo infusion
Reporting group description: -	

Primary: Number of TLESRs	
End point title	Number of TLESRs
End point description:	
End point type	Primary
End point timeframe:	
Comparison between three conditions	

End point values	Methylnaltrexone subcutaneous + placebo infusion	Methylnaltrexone subcutaneous + naloxone infusion	Placebo subcutaneous + placebo infusion	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	15	15	15	
Units: Number of TLESRs				
arithmetic mean (standard deviation)	7.2 (± 1.3)	7.3 (± 1.6)	8.6 (± 1.3)	

Statistical analyses

Statistical analysis title	ANOVA number of TLESRs
Comparison groups	Methylnaltrexone subcutaneous + naloxone infusion v Methylnaltrexone subcutaneous + placebo infusion v Placebo subcutaneous + placebo infusion
Number of subjects included in analysis	45
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	< 0.05
Method	ANOVA

Adverse events

Adverse events information[1]	
Timeframe for reporting adverse events:	
From signing the informed consent until the end of the last study visit	
Assessment type	Non-systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	23

Frequency threshold for reporting non-serious adverse events: 5 %

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.
Justification: Hunger was reported in the three different conditions. Hunger was caused by the study protocol (subjects needed to be fasted durng the study visits) and not due to the study medication

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported